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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,777	03/24/2004	Seung Min Lee	2080-3242	6072

7590 05/05/2006
JONATHAN Y. KANG, ESQ.
LEE, HONG, DEGERMAN, KANG & SCHMADEKA
14th Floor
801 S. Figueroa Street
Los Angeles, CA 90017-5554

EXAMINER

QUARTERMAN, KEVIN J

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/808,777	Applicant(s) LEE ET AL.	
	Examiner Kevin Quarterman	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12 and 14-18 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and remarks received 06 February 2006 have been entered and overcome the objection to the title.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakasegawa (US 6,023,130).
4. Regarding independent claim 1, Figure 2(a) of Sakasegawa shows a plasma lighting device comprising a bulb (10, 14) emitting light, being formed of a transparent material (col. 8, ln. 41-47), and having a plurality of semicircular patterns (13) formed on a surface of the bulb due to an alignment of grooves having a predetermined depth formed on a surface of the bulb; and a metal (12) formed in the grooves.
5. Regarding claim 2, Sakasegawa discloses the transparent material including one of glass and plastic (col. 8, ln. 36-40).
6. Regarding claim 3, Figure 2(a) of Sakasegawa shows the surface of the bulb including a plurality of patterns having one of a circular shape, a triangular shape, and a polygonal shape.

7. Regarding claim 4, Figure 2(a) of Sakasegawa shows the grooves formed on at least one of an outer surface and an inner surface of the bulb.
8. Regarding claim 6, Figure 2(a) of Sakasegawa shows the metal formed along the grooves in the form of a wire.
9. Regarding claim 7, Figure 2(a) of Sakasegawa shows the metal filled within the grooves.
10. Regarding claim 8, Sakasegawa discloses the metal including one of copper, aluminum, and silver (col. 13, ln. 62-65).
11. Regarding independent claim 9, Figure 2(a) of Sakasegawa shows a plasma lighting device comprising a bulb (10, 14) emitting light, being formed of a transparent material (col. 8, ln. 41-47), and having a plurality of v-shaped patterns formed on a surface of the bulb due to an alignment of a plurality of grooves (13) having a predetermined depth; and a metal (12) formed in the grooves.
12. Regarding claim 10, Sakasegawa discloses the transparent material including one of glass and plastic (col. 8, ln. 36-40).
13. Regarding claim 11, Figure 2(a) of Sakasegawa shows the surface of the bulb including a plurality of patterns having one of a circular shape, a triangular shape, and a polygonal shape.
14. Regarding claim 12, Figure 2(a) of Sakasegawa shows the grooves formed on at least one of an outer surface and an inner surface of the bulb.
15. Regarding claim 14, Sakasegawa discloses the metal including one of copper, aluminum, and silver (col. 13, ln. 62-65).

Response to Arguments

16. Applicant's arguments filed 06 February 2006 have been fully considered but they are not persuasive.

17. In response to applicant's argument that the display cells of Sakasegawa are not semicircular or v-shaped, as recited in independent claims 1 and 9, the Examiner notes that Figures 3(a) of Sakasegawa shows the display cell having a v-shape, while Figure 3(b) of Sakasegawa shows the display cell having a semicircular shape. Thus, the Examiner holds that Sakasegawa teaches the limitations of independent claim 1 and 9, as discussed earlier.

Allowable Subject Matter

18. Claims 15-18 are allowed.

19. The following is a statement of reasons for the indication of allowable subject matter: Regarding independent claim 15, the prior art of record neither shows or suggests a plasma lighting bulb comprising, in addition to other limitations of the claim, a plurality of hexagonal patterns formed on an outer surface of the bulb due to an alignment of a plurality of grooves having a predetermined depth. Due to their dependency upon independent claim 15, claims 16-18 are also allowable for the same reason.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Houkes (US 4,568,859) discloses a discharge lamp with interference shielding.

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

22. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2879

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq

1 May 2006



Joseph Williams
Primary Examiner
Art Unit 2879